Message

From: Whalan, John [Whalan.John@epa.gov]

 Sent:
 10/18/2013 2:46:18 PM

 To:
 Ex. 6 Personal Privacy (PP)

CC: jennifer.welham@icfi.com; greg.carter@icfi.com; Blake, Carolyn [Blake.Carolyn@epa.gov]; Glenn, Barbara

[Glenn.Barbara@epa.gov]; Kraft, Andrew [Kraft.Andrew@epa.gov]

Subject: FW: Sensory Irritation Comments on Formaldehyde document

Attachments: FormaldehydeTRdraft070113forREVIEW (2) DC Wolf comments cw.docx

Brian,

The respiratory pathology sections were also reviewed by Charles Wood, a veterinary pathologist. I have attached Charles' Email below. I would suggest that you begin your work with the attached document since it contains the comments of both Doug Wolf and Charles Wood.

John E. Whalan Inhalation Toxicologist, ORD-NCEA-IRIS

Phone: 703-347-8639 Fax: 703-347-8689

Mail: US EPA, Mailcode 8601P 1200 Pennsylvania Avenue, NW Washington, DC 20460-0001

Location: Two Potomac Yard, Suite N-7218 2733 S. Crystal Drive, Arlington, VA 22202

From: Wood, Charles

Sent: Wednesday, July 24, 2013 6:16 PM

To: Whalan, John **Cc:** Wolf, Doug C.

Subject: RE: Sensory Irritation Comments on Formaldehyde document

Hi John,

Ex. 5 Deliberative Process (DP)

Glad to discuss further anytime.

--Charles

From: Whalan, John

Sent: Wednesday, July 24, 2013 4:27 PM

To: Glenn, Barbara; Kraft, Andrew

Cc: Burgoon, Lyle; Davis, Allen; Galizia, Audrey; Hazari, Mehdi; Jarabek, Annie; McLanahan, Eva; Reinhart, Paul; Stanek,

John; Wolf, Doug C.; Wood, Charles; Woodall, George

Subject: Sensory Irritation Comments on Formaldehyde document

Barbara and Andrew,

George Woodall and Mehdi Hazari have reviewed the sensory irritation sections and provided comments. George has offered some comments on the Liu et al. (1991) study and attached several items related to it. Please note also George's comments below.

John Whalan

From: Woodall, George

Sent: Tuesday, July 23, 2013 5:12 PM **To:** Whalan, John; Stanek, John **Cc:** Burgoon, Lyle; Hazari, Mehdi

Subject: Sensory Irritation Comments on Formaldehyde document

John & John,

Here are the combined comments on Sensory Irritation from Mehdi and me. I have also attached some supplementary documents (AEGL/RIVM White Paper on use of the Alarie Test; BMC analysis of the Liu et al. study) to go with many of my comments. I neglected to mention on the BMD analyses that I did not convert units, but instead used the ppm values reported in the original paper. Conversions were performed on the output and used in my comment balloons in the document.

Here are some overarching comments; many are not included in the comment balloons.

- There seems to be many cases of inconsistency between sections. For example, the Hanrahan study was chosen
 as superior to the Liu et al study in Section 2.1, but was given a tier rating of 2B versus a Tier 1 rating for the Liu
 et al. study in Section 1.2.
- There seems to be a whole lot of inconsequential and tangential studies included in the body of the text and the evidence tables. Their inclusion does nothing for clarity and seems to only add to the bulk of the sections.
- There seems to be a lack of an overall review of inhalation effects; a synthesis across all of the disaggregated sections would help to draw all of these effects together more cohesively.

Hope this is helpful. I will be in the next two days if there are questions.

George